

1°EPA, DEM regulate direct point source discharge of pollutants to surface by industry, wwtf (NPDES), delegated authority to "control authorities (WWTFs)" re. major industrial and commercial users(). EPA, DEM protect gw via groundwater injection; ISDS, wetlands, UST and wellhead protection; water quality cert for runoff. DOH regulates water quality for human health (SDWA).

2° ACOE, DEM, CRMC regulate development in/near wetlands, buffers, floodplains etc. for navigational servitude...pt doctrine etc.

3° cities and towns regulate land use within wetlands and buffers, designated sole source aquifer recharge areas etc. subject to state law, Comp Land Use Planning Act etc.

### \*\*PROBLEMS:

- little control over w/drawals,
- any private use of private property that results in water contamination unless reported and/or detectable
- Imperfect control re. ISDSs, (L)USTs, wellhead protection...
- Imperfect to no control re. pesticide, fertilizer use beyond education, exhortation

SOURCES OF SUPPLY and WATER USERS			WHO REGULATES WITHDRAWALS?
U.S. Geological Survey, Rhode Island Compilations for 1995			
Category: Total Population	1995		
total population of area, in thousands	989.8		
Category: Public Supply	1995	PUBLIC SUPPLY	SWRB
population served by surface water, in thousands	727.88	domestic	(30?) Major Suppliers
population served by ground water, in thousands	149.86	commercial	(420 non-PUC regulated)
total population served, in thousands (%)	877.7 (88.7)	industry	WWTFs re. Poll Prevention
total withdrawals, ground water, in Mgal/d	15.73	fire districts, muni	user fees
total withdrawals, surface water, in Mgal/d	98.52	golf courses	
reclaimed wastewater, in Mgal/d	0.00	ag, silviculture, turf?	DEM (NBC, Port, J'town)
Category: Commercial--SELF-SUPPLY???	1995	COMMERCIAL	
total withdrawals, surface water, in Mgal/d	0.00	laundromats	Suppliers?
total withdrawals, fresh, in Mgal/d	1.47	restaurants	WWTFs if sewerage?
deliveries from public suppliers, in Mgal/d	19.75	car washes	affected riparians
consumptive use, fresh, in Mgal/d	2.12		Town during emergency
Category: Domestic/Industry---SELF-SUPPLY	1995	SELF-SUPPLY	
self-supplied population, in Mgal/d (Industry self-supply Mgal/day)	112.1 (1.14)		affected riparians, Town during water emergency
Category: Total Thermoelectric Power (Fossil, Geothermal, Nuclear)	1995	THERMO	DEM re. in-stream uses
ground-water withdrawals, fresh, in Mgal/d	0.00	24 facilities using	EPA, DOI (USFWS), NPS, AHR), FERC, NEIWPCC, DEM, CRMC
surface-water withdrawals, saline, in Mgal/d	274.50	marine cooling H2O?	PUC, AG,
total withdrawals, surface water, in Mgal/d	274.50		
reclaimed wastewater, in Mgal/d	0.00		
number of facilities	24		
Category: Mining	1995	MINING	
ground-water withdrawals, fresh, in Mgal/d	0.54	sand and gravel	cities and towns?
surface-water withdrawals, fresh, in Mgal/d	5.67		
consumptive use, total, in Mgal/d	0.77		
Category: Total Livestock	1995	LIVESTOCK	info, market-based
total withdrawals, ground water, in Mgal/d	0.49		advice from DEM Ag
surface-water withdrawals, fresh, in Mgal/d [3.05 for 'animal specialties']	3.07	stock ponds?	URI -USDA Coop Ext, WHIP...
consumptive use, total, in Mgal/d	2.85		
Category: Irrigation	1995	IRRIGATION	info, market-based
ground-water withdrawals, fresh, in Mgal/d	0.73	fruit, vegetables	advice from DEM Ag
surface-water withdrawals, fresh, in Mgal/d	1.56	silviculture	URI -USDA Coop Ext,
reclaimed wastewater, in Mgal/d	0.00	turf	
		golf	
		nurseries	
Category: Hydroelectric Power	1995	HYDROELECTRIC	FERC, DOI (USFWS), EPA, DEM, CRMC
instream water use, in Mgal/d	339.29		
Category: Wastewater Treatment	1995	WWTF Return flow	
returns by public wastewater facilities, in Mgal/d	182.03		EPA, DEM
number of public wastewater facilities	115		
reclaimed wastewater released by public wastewater facilities, in Mgal/d	0.00		